NATIONAL DEFENSE UNIVERSITY NATIONAL WAR COLLEGE

DETERRENCE IN THE NATIONAL SECURITY OF A MIDDLE - SIZED COUNTRY

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Report Documentation Page

Form Approved OMB No. 0704-0188 **THESIS:** Deterrence is useful in the national security of a middle-sized country.

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1. INTRODUCTION

The idea of deterrence is rather simple and refers to military strategy under which one power uses a threat to preclude an attack from an adversary power. The word "deterrence" is derived from the Latin de + terrere and literally means "to frighten from" or "to frighten away." Thus, threat and fear are central to the original meaning of deterrence.

Military deterrence and its application in various forms has a long tradition in the art of war. In the early history of humankind, the main method of deterring an enemy was to capture the attention of his senses, mostly visual and auditory, and thereby to activate the enemy's imagination. To frighten a foe, bright colors on the body and weaponry were used; warriors in their outfits imitated fearsome animals, or generated frightening sounds, such as, for example, during the famous Battle of Vienna (1683) when Polish cavalry, known as "winged horsemen," charged the enemy.

With time, military inventions and development of new means of fighting increased the efficacy and credibility of deterrence. The use of artillery, balloons, and airplanes from the beginning of the 20th century was considered as one of the means of deterrence before World War II (Olszewski 1998: 9-13).

The end of World War II, and the use of nuclear weapons, started a new era in military deterrence. During the Cold War, nuclear weapons became the central element in the defense of the nuclear powers.

With the fall of the iron curtain the paradigm that "strategic deterrence" means "nuclear deterrence" is now often being questioned (see Lebow, Stein 1995; Boulder 1990). One can observe that there is a considerably broad perception that nuclear weapons are a burdensome legacy of the Cold War and have lost their relevance to maintaining international security. In the context of these new developments, it is argued, effective deterrence can also be achieved by manifold actions ranging from effective diplomatic action to military deterrence by means of conventional weaponry. Few would disagree that conventional deterrence will play a greater role in the future.

After the collapse of the bipolar world, some medium-sized non-nuclear countries of Eastern Europe, like Poland, Hungary, the Czech Republic and others began to experience the absence of a nuclear security umbrella. In the new political and military environment, these countries naturally started to look toward integration with Western European structures and NATO. In order to attain these goals, these newly emerged democracies must find an appropriate approach to political, military, and structural problems. Even though some Central and Eastern European countries have joined NATO, they and the others should not stop thinking about their own security. In fact, in this new status quo, medium-sized non-nuclear states need to determine their own rational military strategy that will ensure their national security. The strategy should take into consideration existing threats, non-military as well as military. These include arms limits and budgetary cuts as well as chances of minimizing a potential aggressor's advantages. Most military doctrines of European countries are of a defensive nature. They place a special emphasis on retention of sovereignty, territorial integrity, and political independence as keystones to the state defense structure. At the same time, military deterrence becomes a peace-stabilizing, aggression-preventive factor, especially for the countries that cannot afford sophisticated and costly armed forces.

Nowadays, for medium-sized countries in a multipolar world, there seems to be no alternative but conventional military deterrence. Such deterrence has to be worked out in detail. Careful planning and good organization is vital in this situation because otherwise, military deterrence might be easily discredited, as has occurred in the past. Therefore, deterrence needs to be supported by credible military and economic potential, effective diplomacy and intelligence, wide publicity and, last but not least, proper alliances.

The present paper will attempt to discuss the issue of deterrence in maintaining the national security of a middle-sized country. I will argue that conventional deterrence is an appropriate means to maintain a national security strategy for a middle-sized non-nuclear country. To have a general idea about the topic being discussed, the first part of the paper will address the various aspects of conventional deterrence and its role in the concept of national security. The second part will deal with the systems of military deterrence and the principles of its functioning. Credibility of military deterrence strategy will be discussed in the final part.

2. MILITARY DETERRENCE IN THE CONCEPT OF NATIONAL SECURITY

National security must be analyzed in relation to the threats faced and the ability to counter them. The threats may originate in conflicts of a political, social, economic, ethnic, or military nature. Of all the above sources, the military ones are especially important as they might endanger the existence of the state itself.

Threats are likely to evolve into conflicts. Potential unwillingness of adversaries to compromise can give rise to escalation of demands, and mutual accusations, which can create crisis situations and threaten national security. Unfortunately, participation in a political or military alliance does not exclude the possibility of such threats, e.g. the long-lasting conflict of Greece and Turkey, of Chechnya and Russia, or similar situations anywhere else in the world.

Still, alliances create favorable conditions for reducing threats and resolving conflicts. To effectively counter threats, a state sets up **a national security structure** that "comprises forces and means and a clear plan of applying them to ensure peace and national security" (Dworecki, 1996:186). It can be set up either independently or in an alliance. It should ensure ability to effectively counter both internal and external threats while maintaining security within the country.

Forces and means, which are allocated to ensure national security, constitute a primary tangible element affecting the effectiveness of such a system. Their quality and quantity, dependent on numerous factors, exert influence upon the choice of the national security concept, which deals with methods of eliminating any threats or tensions with all available forces and means.

Medium-sized states with no global ambitions claims towards their neighbors e.g. territorial usually accept a security concept that meets international approval. Such concepts are known to eliminate threats or ease tensions by means of dialogue, cooperation, and peaceful crisis management measures. Relations between threats and security in the state defensive structure are presented in fig.1.

A medium-sized country with no firm guarantee of sovereignty and peaceful existence is forced to choose a clearly defined option of security and defense strategy. Theoretically, when discussing the security of a medium-sized country, five security options can be mentioned:

- relying exclusively on one's own armed forces;
- political and military alliances;
- relying on a superpower's "protective umbrella";
- functioning within a joint security network;
- participation in a worldwide federation (Balcerowicz 1996: 61).

Results of analyses of the security options indicate that a medium-sized country should primarily **rely on its own armed forces**. Even if another option is chosen, a state still has to keep its own armed forces and safeguard its security. The choice of the option expressed by the state's military doctrine directly influences the choice and character of the state is military strategy.

Generally speaking, **strategy** means the theory and practice of any activity aimed at reaching given objectives through all aspects of incorporating forces, means, and methods of military operations. The place of strategy in military sciences is multi-dimensional. For research purposes, military strategy has been defined as "being a part

of strategy focusing on creating, developing and applying armed forces in all aspects and circumstances of the functioning of the state" (Dictionary of Military Terms 1996:73). The goals that military strategy must realize define its character.

Pertinent to our further discussion is the defense strategy of a non-nuclear, medium-sized country. Basic defensive strategies, commonly known as classic strategies, which are particularly useful for a medium-sized country, are the following:

- retreat-fatigue,
- preemptive offensive,
- border defense,
- all-out defense (Balcerowicz 1997: 165).

Of course, the above list does not cover the whole strategic spectrum.

The crux of **retreat**—**fatigue strategy** is taking advantage of time and terrain to compensate for the shortage of forces and means with maneuvering. This strategy is adopted only if a state, due to the shortage of forces, cannot create and sustain a front.

Preemptive offensive strategy allows for carrying out preemptive strikes if there is a direct threat of aggression. A clear advantage of the strategy is pushing all activities onto the enemy's territory from the very moment a conflict breaks out.

Thus, with a threat of a punishing action, deterrence becomes more credible.

Border defense strategy assumes that an aggressor is stopped within the border zone thus denying his deep offensive into the attacked country. It may be adopted in limited local conflicts or in defense of a small country.

All-out defense strategy assumes that absolutely all means the state has at its disposal – human, material and moral – are used in its defense. The strategy allows for any form of combat as well as non-armed resistance.

3. STRATEGY OF DETERRENCE

Military deterrence strategy has been applied, though not widely advocated, for many years.

"Military deterrence strategy is the theory and practice of creating and using military potential in such a way that an adversary is discouraged from undertaking any military activity owing to both difficulty in reaching the given goals and a foreseen level of casualties" (Olszewski 1998: 99).

The components of military deterrence strategy are presented in fig.2.

The first component of this strategy is **the theory of deterrence**. This comprises research in to the adequacy of deterrence, a potential aggressor's opinion on deterrence, credibility and effectiveness of deterrence, as well as establishing rules for preparing, carrying out ,and securing military deterrence. Results of the research, done on a fairly large scale are the bases for the second component of military deterrence that is **the practice of deterrence**. It comprises preparation of the system and forces of deterrence, plans for their use, support, and command. Theoretical and practical aspects of deterrence must include purposes and specific conditions of deterrence, delegated forces and means, and of course the political and military situation.

The military deterrence strategy has not so far gained great importance in the art of war. Usually it is incorporated as one of the elements in so-called "classic strategy."

The study of sources on the role of military deterrence in the security of mediumsized non-nuclear countries allows us to distinguish two different positions.

The first assumes that military deterrence should be treated as a primary and independent defensive strategy to ensure effective defense of a medium-sized country.

The second assumes that military deterrence should complement "classic" defensive strategies of the state. Advocates of this approach claim that through determined defensive activity, combining the effort of armed forces and the civil defense, the state reaches the effective level of deterrence by denying the aggressor territorial gain, which originally was the goal of the aggression. When the advocates of this approach talk about deterrence they often mean defensive readiness. Deterring activities are marginal and pose no deterrent threat to the aggressor's plans. Besides, deterrent elements in the traditional defensive strategies (retreat-fatigue, defending borders, all-out defense) may not ensure sufficient credibility and effectiveness of deterrence. Conventional deterrence requires full use of offensive and defensive capabilities to constitute a credible threat, which may resolve the question of aggression by making it unprofitable.

Acceptance of a military deterrence strategy as a primary and independent defensive state strategy (the first position noted above) is obviously more cost-effective and modern. At the same time, this approach requires the engagement of fewer forces and means, remaining effective by inducing numerous uncertainties and

providing capabilities of credible threat by rendering aggression unprofitable and by the possibility of punishment once the aggression is committed.

Military deterrence strategy may lay solid foundations of peace, characterized as "peace motives" over a century ago by Karl von Clausewitz (1958: 38) in his classic *On War*, rendering aggression improbable due to its high cost. Military deterrence, apart from preventing aggression, which is its major role, serves other purposes:

- discouraging a potential aggressor from using its armed forces as a means of exerting political pressure;
- preventing military aggression;
- halting combat actions;
- strengthening the position and authority of a medium-sized country abroad (Marczak; Pawłowski 1995: 233).

Military deterrence strategy can provide security to a medium-sized country under coerced self-defense conditions even if an aggressor who is both economically and militarily stronger poses a threat. For such a strategy to be effective, however, it must be consciously adopted and purposefully implemented. First, such a country should recognize that a military deterrence strategy is its most suitable option. Second, it must assemble and apply sufficient deterrent capabilities by effective use of its military assets. Third, it must implement a rational application of a military deterrence strategy in the modern world by a system of properly prepared and effectively used conventional deterrence forces. This will be addressed in the following section.

4. THE SYSTEM OF MILITARY DETERRENCE AND

PRINCIPLES OF ITS FUNCTIONING

From the goals, conditions, and assumptions of the functioning of the strategy of military deterrence comes the need for such a military deterrence system as will ensure effective realization of the strategy.

The system of military deterrence of a country is understood as an internally coordinated set of structural components, mutually related and working for the sake of the country's defense within the framework of the strategy of military deterrence (Olszewski 1998: 102).

This system consists of three elements. The main ones (presented in figure 3). Are the following sub-systems: (1) military, (2) non-military, (3) command ,and (4) logistics.

The main component of military deterrence is a military sub-system (attack), which is comprised of the armed forces. This sub-system determines the potential capability of inflicting damage to an aggressor and in this way establishes the cost of an aggression that reduces or eliminates the motivation for hostile actions. In the situation of a medium-sized non-nuclear country, the military sub-system should possess such means of attack as would guarantee inflicting considerable damage during both offensive (retaliatory) actions on the enemy's territory and defensive ones on its own. The level of effectiveness of military deterrence depends also on human factors, training, physical and psychological factors, experience, morale and determination.

Military equipment is not the only important factor in military deterrence. Also, all the means that guarantee its proper and effective use are important, such as reconnaissance, command and security, psychological and political operations, and support from the international community (Ertoran, Tandeo 1991: 58; Jervis, Lebow, Stein 1985).

From the existing kinds of military force in the military subsystem, the greatest usefulness is ascribed to the air force, and almost equally important are the land forces and navy. In the process of evaluation of the usefulness of various military forces in the strategy of deterrence, the priorities are assigned to:

- multi-purpose air force
- ballistic and antiaircraft missiles
- unmanned aircraft and cruise missiles
- air defense
- reconnaissance and electronic warfare
- rocket artillery
- sabotage groups

What is important in the choice of weapon systems to be used for deterrence is the capability of reaching targets on the aggressor's territory and inflicting damage. What is also appreciated is its resistance to destruction and jamming, its reliability, and other properties of military deterrence. It is commonly thought that military deterrence forces should possess state-of-the-art weapon systems, capable of a precision strike in any conditions.

In fact the whole military sub-system (military deterrence system) must form a unified system capable of carrying out various tasks, in different directions, effectively commanded and well secured.

It is worth noting that history proves that the very possession of a superior military and a strong economy, in the case of strong countries, is enough to carry out a deterrence policy (Snyder 1961; Freedman 1981). Using different forms of pressure, provocation, and military blackmail can help to achieve desired objectives.

The effect of deterrence can be attained on its own, and potential dangers never appear. On the other hand, weaker countries, to achieve the same aim, must take actions in order to establish a real threat of a retaliatory attack (Mearsheimer 1983).

Because of that, weaker countries must use system solutions in order to guarantee the credibility of deterrence, if they are not able to maintain their armed forces on a defensive level that is minimally acceptable. Also, they must realize that deterrence might not work, and because of that they should try to reduce the superiority of an opponent by making their deterrence forces less vulnerable, more mobile, and better camouflaged and deployed.

In the system of military deterrence the **non-military** subsystem is equally important. Its main function is to support the military system and to provide a wide variety of psychological operations. The non-military subsystem is designed to be centrally coordinated and controlled and it is intended to maximize the reliability of the strategy as well as to increase the enemy's losses, while denying the realization of the aggressor's goals.

The results of the psychological operations depend largely on the means and methods employed. It is often mentioned that the successful use of psychological operations is determined by the understanding of character features and behavior patterns typical of crisis situations (see Lebow 1985).

Another subsystem of the military deterrence system is the **logistics subsystem**, which should function on the national level, independent of the similar systems in place within the individual cells of the deterrence system. Such a system should be based on logistical institutions within different branches of the economy, manufacturing plants, maintenance, repair, footprint for deployed forces, and retail networks.

The system of military deterrence has to be organized according to the principles of the theory of deterrence. It may be based on the Ministry of National Defense (MND) directives in keeping with a nation's military doctrine as formulated by the legislative body. The MND will be responsible for allocating the forces to the system and for their tasking. The make-up of the system must be sufficient to ensure that the deterrence is sufficiently credible so that its goals will be achieved. In turn, the credibility of deterrence is a function of the credibility of the threat it poses.

5. CREDIBILITY OF A MILITARY DETERRENCE STRATEGY

Deterrence is a result of thinking of a potential action of the opponent and of the forces involved in such an action. According to Admiral Arleigh Burke, deterrence is located in the human mind. It concerns not only the assets of the deterring country,

but also what it will do, what it is committed to do, as well as what others think that it will do (Eccles 1988: 63).

The military potential necessary to carry out deterrence is the **material basis** of the threat. Such potential is never static and it undergoes continuous transformations depending on the dynamics of the situation in which deterrence is carried out.

According to experts in the field (Huth 1988: 4-11) the most significant factors influencing credibility of deterrence are the following:

- destructive potential of the deterring forces;
- effectiveness of a retaliatory strike;
- effectiveness of psychological action
- survivability of military deterrence forces;
- appropriateness of targets.

Credibility of a threat is also dependent on the scale of damages potentially inflicted, which involves proper selection of targets. Destroying nuclear, ecological, military, industrial, and demographic objects constitutes the most serious threat for the enemy.

A threat must contain an amalgam of possibilities and the intentions of the deterring party as clear evidence of the fact that the threat would be fulfilled if necessary (Maxwell 1968: 24). It must also have a tangible basis. Rhetoric without credible military capabilities will not only fail to deter but it may have an opposite effect should the enemy become aware of the situation.

Generation and application of threats must fulfill certain moral obligations and be in compliance with the norms of international law. This is the basic condition to obtain international support and approval (Finnis, Boyle, Gisez 1987).

The most important factor in making deterrence credible is conviction on the part of the person making the threat that he has not only the potential but also the will to use it (Byers 1985: 32). J. Coffey expressed the following opinion in his work on the effectiveness and credibility of deterrence:

"The expected casualty rate is but one of the factors in deterrence, apart from the determination to inflict these caussalities, informing the enemy of our intentions, as he is determining and analyzing the potential costs, possible risks and possible benefits of taking or abandoning his intended action. In numerous instances these **subjective elements** may turn out to be more significant than the real ability to inflict caussalities" (cited after Bertram 1994: 47).

The credibility of military deterrent threats is based on three things, even when logically the chances of their application are small. The three phenomena are: (1) fear of war, (2) uncertainty, and (3) chance. Uncertainty and chance can cloud human judgment and lead to constant suspicions that this threat may be fulfilled to leading to war. (Kahn 1960: 34).

Deterrence by uncertainty bring about doubts concerning any attack and the probable response. Factors that may contribute to deterring a potential aggressor from taking the risk include its overestimation of its opponent, its underestimation of itself, as well as inappropriate interpretation of its opponent's intentions (Kissinger 1957: 84).

The threat of chance is connected with unpredictable complications that can occur despite efforts of both sides. The intervention of third parties or an ineffective process of making decisions are the examples of possibilities that can cause unwanted consequences (Schelling 1960: 45).

The likelihood of any aggressor's attack is the result of four basic factors which when combined together can be described as a "risk calculation" of the aggressor (Snyder 1961: 21).

The following constitute these factors:

- the aggressor's military targets,
- calculation of the costs of aggression,
- the credibility of possible deterrent reactions, and
- the ability to achieve aggression targets in case of various reactions of a victim.

Determinants of the aggressor's risk calculation are presented in figure 4.

The aggressor's war targets define the level of his motivation and commitment to military operations. Evaluation of the aggressor's costs and benefits from the potential war (from beginning to end) depends on the aggressor's choice of possible activities and the reactions of the deterrent country. It should be assumed that every aggressive activity would elicit a reaction from the aggressor's victims.

Calculation of the costs of aggression is based on subjective and uncertain factors, which are difficult to measure. Therefore calculation of costs should be done intuitively.

Theorists of the subject of deterrence stress the need to study the attitude of the deterrent country in order to increase the credibility of deterrence (Byers 1985: 142). This attitude should not be perceived by the opponent as a visible capacity to attack but only as the ability to deter. Moreover the ambiguity of threats of retaliation should be carried out in such a way that the opponent would not feel deprived of international prestige and reputation.

6. CONCLUSION

The purpose of this paper was to discuss the role of military deterrence in the national security of a middle -sized country. We have seen that the basic advantage of the military deterrence strategy is its usefulness in establishing security and preventing armed conflicts. Currently the main objective of the national military strategy is the determination not only how to win the war but also how to prevent it from happening. The strategy of military deterrence advances these objectives.

The key issue in the credibility of the deterrence, for the nation must have at its disposal not only the state-of-the-art means of defense of its territory, but also the capacity for retaliation which makes aggression too costly for the potential aggressor. The credibility of the threat and the ability to convince the potential opponent that the threat will materialize, if the need arises, are key elements of the military deterrence strategy. Hence, the strategy of military deterrence is a significant component of military art. It constitutes an instrument for practical use of military deterrence with conventional arms as well. As discussed in the paper the content of the military

deterrence strategy, its theoretical and practical side, as well as its aims, make it suitable for a basic, independent strategy in the defense system of a non-nuclear country of medium size.

7. BIBLIOGRAPHY

Balcerowicz B. 1996. Wystarczalność obronna. (Defense Sufficiency). Warszawa.

Balcerowicz B. 1997. Obronność państwa średniego. (*Defense of a Middle-Sized Country*). Warszawa.

Bertram Ch. 1994. Strategic Deterrence in a Changing Envadornment. London.

Boulder B. H. (Ed.). 1990. Alternative Security. Living Without Nuclear Deterrence.

West view Press.

Byers R. 1985. Deterrence in the 1980's. Crisis and Dilemma. London.

Clausewitz K. 1958. O wojnie. (On War). Warszawa.

Dworecki S. 1996. Od konfliktu do wojny. (From a Conflict to War). Warszawa.

Eccles H. 1988. Military Concepts and Philosophy. New Brunswick.

Ertoran R., Tandeo F. 1991. Le Concept de Suffisance des Forces Classiques. (*The Concept of Sufficiency of Classic Forces*) Defense Nationale.

Finnis J. J., Boyle M. Jr., Gisez, G. 1987. Nuclear Deterrence, Morality and Realism.

New York.

Freedman L. 1981. The Evolution of Nuclear Strategy. New York.

Kahn H. 1960. On Thermonuclear War. Princeton.

Kissinger H. 1957. The Necessity for Choice. New York.

- Lebow R. N., Stein J. G. 1985. Psychology and Deterrence. Baltimore.
- Lebow R. N., Stein J. G. 1995. Deterrence and the Cold War. *Political Science Qurterly*. Vol. 110. pp. 157-181.
- Marczak J., Pawłowski J. 1995. O obronie militarnej Polski przełomu XX–XXI wieku.

 (On Military Defense of Poland on the Turn of 20th Century). Warszawa.
- Maxwell S. 1968. Rationality in Deterrence. London.
- Mearsheimer J. 1983. Conventional Deterrence. New York.
- Olszewski R. 1998. Lotnictwo w odstraszaniu militarnym. (*Air Force in Military Deterrence*). Warszawa.
- Schelling T. 1960. The Strategy of Conflict. Cambridge.
- Snyder G. 1961. Deterrence and Defense: Toward a Theory of National Security.

 Princeton.